Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the above-referenced application.

Listing of Claims

1. **(Currently Amended)** A fuse assembly comprising:

a fuse element prepared in a substantially non-linear form, the fuse element comprising at least two terminals, the at least two terminals comprising a first terminal and a second terminal;

at least two conductive endcaps, the at least two conductive endcaps comprising a first conductive endcap and a second conductive endcap, wherein

said first conductive endcap comprises a first end coupled to said first terminal and a second end, and

said second conductive endcap comprises a first end coupled to said second terminal and a second end; and

~~being coupled to the first terminal and the second terminal; and~~

a fuse body comprising a dielectric material adapted to substantially enclose the fuse element between the at least two endcaps, wherein

~~at least~~ a first portion of the dielectric material is positioned ~~between~~ in an area bounded by said fuse element ~~in a substantially non-linear form~~ and a line connecting said first terminal and said second terminal ~~two ends of the fuse element~~ to impede arcing across the fuse element, and

a second portion of the dielectric material occupies an area from said first ends to said second ends to impede arcing between said first conductive endcap and said second conductive endcap

~~the fuse element is separated from said portion of the dielectric material by a space along a length of said fuse element~~.

2. **(Currently Amended)** The fuse assembly of claim 1, wherein the substantially non-linear form of the fuse element ~~is substantially~~ comprises a curve.

3. **(Currently Amended)** The fuse assembly of claim 1, wherein
the fuse element is capable of experiencing arcing as a result of an opening being created in at least a portion of the fuse element, the opening having two ends, and
the first portion of the dielectric material forces arcing between the two ends of the opening to traverse a path consistent with the substantially non-linear form.

4. **(Currently Amended)** The fuse assembly of claim 3, wherein the ~~at least portion of the~~ dielectric material comprises a superior dielectric material.

5. **(Currently Amended)** The fuse assembly of claim 3, wherein the path is consistent with a shape of the ~~at least~~ first portion of the dielectric material.

6. **(Currently Amended)** The fuse assembly of claim 3, wherein the arcing causes formation of a conductive path along a surface of the ~~at least~~ first portion of the dielectric material.

7. **(Original)** The fuse assembly of claim 6, wherein the conductive path is comprised of carbon.

8. **(Original)** The fuse assembly of claim 6, wherein the conductive path reduces an insulating value of the dielectric material.

9-11 **(Canceled)**

12. **(Currently Amended)** The fuse assembly of claim 3, wherein said first portion of the dielectric material which forces ~~forcing~~ the arcing between the two ends of the opening to traverse the path introduces an increased amount of dielectric separation.

13-14 **(Canceled)**

15. **(Currently Amended)** The fuse assembly of claim 3, wherein the opening is ~~caused~~ created by ~~passing~~ an excessive current passing through the fuse element, the excessive current causing a meltdown of at least a portion of the fuse element.

16-17 **(Canceled)**

18. **(Currently Amended)** A method of reducing a footprint of a fuse element, the method comprising:

preparing the fuse element in a substantially non-linear form, the fuse element comprising at least two terminals, the at least two terminals comprising a first terminal and a second terminal, the footprint being reduced by adjusting a distance between the first terminal and the second terminal;

coupling the fuse element between at least two conductive endcaps, the at least two conductive endcaps comprising a first conductive endcap and a second conductive endcap, wherein

each of said at least two conductive endcaps comprises a first end and a second end, and

said coupling comprises,

coupling said first terminal to said first end of said first conductive endcap, and

coupling said second terminal to said first end of said second conductive endcap ~~coupled to the first and second terminals~~; and

enclosing the fuse element in a dielectric material, wherein

~~at least~~ a first portion of said dielectric material is positioned ~~between~~ in an area bounded by said fuse element ~~in a substantially non-linear form~~ and a line connecting said first terminal and said second terminal ~~two ends of the fuse element~~, and

a second portion of said dielectric material occupies an area from said first ends to said second ends to impede arcing between said first conductive endcap and said second conductive endcap

~~said fuse element is separated from said portion of said dielectric material by a space along a length of said fuse element~~.

19. **(Currently Amended)** The method of claim 18, wherein the substantially non-linear form of the fuse element ~~is substantially~~ comprises a curve.

20. **(Cancelled)**

21. **(Currently Amended)** The method of claim 18, wherein ~~the at least portion of~~ the dielectric material comprises a superior dielectric material.

22. **(Currently Amended)** The method of claim 18, wherein the substantially non-linear form is consistent with a shape of the ~~at least~~ first portion of the dielectric material.

23. **(Currently Amended)** The method of claim 18, wherein

the fuse element is capable of experiencing arcing as a result of an opening being created in at least a portion of the fuse element, the opening having two ends, and

the first portion of the dielectric material forces arcing between the two ends of the opening to traverse a path consistent with the substantially non-linear form.

24. **(Currently Amended)** The method of claim 23, wherein the arcing causes formation of a conductive path along a surface of ~~at least~~ the first portion of the dielectric material~~, the at least a portion of the dielectric material is positioned between an area bounded by the prepared fuse element and a line connecting two ends of the fuse element~~.

25. **(Original)** The method of claim 24, wherein the conductive path is comprised of carbon.

26. **(Original)** The method of claim 24, wherein the conductive path reduces an insulating value of the dielectric material.

27. **(Currently Amended)** The method of claim 24, wherein the first portion of the dielectric material which forces the ~~forced~~ arcing between the two ends of the opening to traverse the path introduces an increased amount of dielectric separation.

28. **(Canceled)**

29. **(Currently Amended)** The method of claim 23, wherein ~~creating~~ the opening is

~~caused~~ created by ~~passing~~ an excessive current passing through the fuse element, the excessive current causing a meltdown of at least a portion of the fuse element.

30-32 **(Canceled)**

33. **(Currently Amended)** A method of increasing dielectric separation between at least two terminals of a fuse element that experience arcing, the method comprising:

preparing the fuse element in a substantially non-linear form;

coupling the fuse element between at least two conductive endcaps, the at least two conductive endcaps comprising a first conductive endcap and a second conductive endcap, wherein

each of said at least two conductive endcaps comprises a first end and a second end, and

said coupling comprises,

coupling said first end of said first conductive endcap to a first terminal of said at least two terminals, and

coupling said first end of said second conductive endcap to a second terminal of said at least two terminals ~~the at least two conductive endcaps being coupled to the corresponding at least two terminals~~; and

enclosing the fuse element in a dielectric material, wherein

~~at least~~ a first portion of ~~the~~ said dielectric material is positioned ~~between~~ in an area bounded by said ~~prepared~~ fuse element and a line connecting said first terminal and said second terminal ~~the at least two endcaps~~ to impede arcing across the fuse element, and

a second portion of said dielectric material occupies an area from said first ends to said second ends to impede arcing between said first conductive endcap and said second conductive endcap

~~said fuse element is separated from said portion of said dielectric material by a space along a length of said fuse element~~.

34. **(Canceled)**

35. **(Currently Amended)** The method of claim 33, wherein the substantially non-linear form of the fuse element ~~is substantially~~ comprises a curve.

36. **(Cancelled)**.

37. **(Currently Amended)** The method of claim 33, wherein ~~the at least portion of~~ the dielectric material comprises a superior dielectric material.

38. **(Currently Amended)** The method of claim 33, wherein the substantially non-linear form is consistent with a shape of the ~~at least~~ first portion of the dielectric material.

39. **(Currently Amended)** The method of claim 33, wherein the arcing causes formation of a conductive path along a surface of ~~at least~~ the first portion of the dielectric material.

40. **(Original)** The method of claim 39, wherein the conductive path is comprised of carbon.

41. **(Original)** The method of claim 39, wherein the conductive path reduces an insulating value of the dielectric material.

42. **(Currently Amended)** The method of claim 33, wherein

the fuse element experiences arcing as a result of an opening being created in at least a portion of the fuse element, the opening having two ends, and

the first portion of the dielectric material forces arcing between the two ends of the opening to traverse a path consistent with the substantially non-linear form.

43. **(Currently Amended)** The method of claim 42, wherein the first portion of the dielectric material which forces the ~~forced~~ arcing between the two ends of the opening to traverse the path introduces an increased amount of dielectric separation.

44-45 **(Canceled)**

46. **(Currently Amended)** The method of claim 42, wherein ~~creating~~ the opening is ~~caused~~ created by ~~passing~~ an excessive current passing through the fuse element, the excessive current causing a meltdown of said at least the portion of the fuse element.

47-68 **(Canceled)**

69. **(Currently Amended)** A method of impeding arcing occurring across a gap formed in a fuse element, the method comprising:

creating the gap in the fuse element, the gap being created as a result of heat generated in response to excessive current flowing through the fuse element, the fuse element being prepared in a substantially non-linear form; and

forcing the arcing across the gap to traverse a path consistent with the substantially non-linear form, wherein

said fuse element is enclosed by a dielectric material and comprises at least two terminals, the at least two terminals comprising a first terminal and a second terminal,

said first terminal is coupled to a first conductive endcap, the first conductive endcap comprising a first end coupled to said first terminal and a second end,

said second terminal is coupled to a second conductive endcap, the second conductive endcap comprising a first end coupled to said second terminal and a second end, ~~and~~

~~at least~~ a first portion of said dielectric material is positioned ~~between~~ in an area bounded by said fuse element ~~prepared in the substantially non-linear form~~ and a line connecting said first terminal and said second terminal ~~two ends of said fuse element~~ to impede the arcing, and ~~the two ends being formed by said opening, wherein said portion of dielectric is separated from said fuse element by a space along a length of said fuse element~~

a second portion of said dielectric material occupies an area from said first ends to said second ends to impede arcing between said first conductive endcap and said second conductive endcap.

70. **(Currently Amended)** The method of claim 69, wherein the substantially non-linear form of the fuse element ~~is substantially~~ comprises a curve.

71-72 **(Cancelled)**.

73. **(Currently Amended)** The method of claim 69, wherein ~~the at least portion of~~ the dielectric material comprises a superior dielectric material.

74. **(Currently Amended)** The method of claim 69, wherein the path is consistent with a shape of the ~~at least~~ first portion of the dielectric material.

75. **(Currently Amended)** The method of claim 69, wherein the arcing causes formation of a conductive path along a surface of the ~~at least~~ first portion of the dielectric material.

76. **(Original)** The method of claim 75, wherein the conductive path is comprised of carbon.

77. **(Original)** The method of claim 75, wherein the conductive path reduces an insulating value of the dielectric material.

78-86 **(Canceled)**

87. **(Original)** The method of claim 69, wherein forcing the arcing across the gap to traverse the path introduces an increased amount of dielectric separation.

88-89 **(Canceled)**

90. **(Original)** The method of claim 69, wherein the heat generated causes a meltdown of at least a portion of the fuse element.

91. **(Original)** The method of claim 90, wherein the meltdown causes creation of the gap.